

AMENDMENTS TO THE CLAIMS

- 1. (Currently Amended)** A hematocrit sensor comprising:

 - a blood circuit having two ends;
 - a blood purifier connected to said blood circuit between said two ends and configured to purify blood that is being circulated extracorporeally in said blood circuit; and
 - a sensor connected to said blood circuit and configured to measure hematocrit values, the sensor including
 - a housing connected to a portion of said blood circuit,
 - a slot provided with said housing,
 - a slit included in said slot of said housing, and
 - a light emission device and a single light reception device provided adjacent to each other in said slot ~~with said housing~~ such that both said light emission device and said single light reception device are in optical connection with each other and positioned to face said blood circuit through said slit.
- 2. (Previously Presented)** The hematocrit sensor of claim 1, further comprising a cover provided at said housing, which covers said slot when said cover is closed.
- 3. (Previously Presented)** The hematocrit sensor of claim 1, further comprising a cover provided at said housing, which swings open against said housing and uncovers said slot when said cover is opened.
- 4. (Previously Presented)** The hematocrit sensor of claim 2, further comprising a holding device configured to hold the cover in place when the slot is covered.

17. (Previously Presented) The method of claim 15, wherein said hematocrit values calculated in said calculating are corrected to compensate an error based on a flow rate of said blood flowing through said blood circuit.

18. (Previously Presented) The method of claim 14, further comprising:
detecting a presence of said blood flowing through said blood circuit, wherein the calculating starts calculating a first of said hematocrit values at a time said detecting first detects said presence of said blood.

19. (Currently Amended) A hematocrit sensor comprising:
a blood circuit having two ends;
a blood purifier connected to the blood circuit between the two ends and configured to purify blood that is being circulated extracorporeally in the blood circuit; and
a sensor connected to the blood circuit and configured to measure hematocrit values, the sensor including
a housing connected to a portion of the blood circuit,
a slot provided with the housing,
a slit in the slot of the housing, and
a single light emission device and a single light reception device both provided adjacent to each other in said slot ~~with the housing~~ and configured to be in optical connection with each other and positioned to face the blood circuit through the slit.